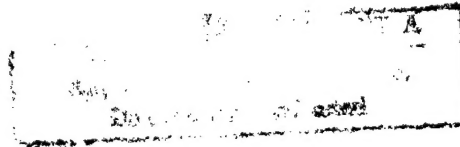


208037

JPRS 84204

26 August 1983



# USSR Report

MILITARY AFFAIRS

No. 1792

19980911 102

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY  
NATIONAL TECHNICAL  
INFORMATION SERVICE  
U.S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA 22104

## NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

## PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semimonthly by the NTIS, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

JPRS 84204

26 August 1983

# USSR Report

MILITARY AFFAIRS

No. 1792

**FBIS** FOREIGN BROADCAST INFORMATION SERVICE

26 August 1983

# USSR REPORT MILITARY AFFAIRS

No. 1792

## CONTENTS

### MILITARY-POLITICAL ISSUES

- Need for Correct Theme in Military TV Program for Youth  
Stressed  
(Justice P. Goroshko, Justice A. Bilokon';  
KRASNAYA ZVEZDA, 2 Apr 83)..... 1

### MINISTRY OF DEFENSE AND GENERAL STAFF

- Success of a MOD Woodworking Combine Noted  
(S. Lagodskiy; KRASNAYA ZVEZDA, 7 Jun 83)..... 5

### ARMED FORCES

- Military Agricultural Collectives Discussed  
(I. Isayenko; ARGUMENYY I FAKTY, 14 Jun 83)..... 7
- Rules, Regulations for Military and Military-Related  
Personnel  
(KRASNAYA ZVEZDA, 31 May 83)..... 10
- Need Stressed for Commanders To Accept Automated Control  
Systems  
(Arty L. Goncharov; KRASNAYA ZVEZDA, 12 Jul 83)..... 12
- Development, Uses of Fiber Optics in Communications  
Described  
(A. Zhovanik; KRASNAYA ZVEZDA, 6 Jul 83)..... 16

Those Desiring To Become Military Officers Must Possess Requisite Qualities (M. Hakimov; YOSH LENINCHI, 21 Apr 83).....	19
Military Education in Samarkand Oblast (P. Rajabov; YOSH LENINCHI, 7 Apr 83).....	20
AIR FORCES	
Exercise Employing Military Transports as Bombers Described (V. Usol'tsev; KRASNAYA ZVEZDA, 22 Jun 83).....	22
AIR DEFENSE FORCES	
Mar Avn Koldunov on Role of Air Defense Forces (Aleksandr Ivanovich Koldunov Interview; VOYENNNYYE ZNANIYA, No 4, Apr 83).....	24
NAVAL FORCES	
Comments on Unkempt Appearance of Crew, Crew Quarters Aboard Ship (Yu. Timoshchuk; KRASNAYA ZVEZDA, 23 Jun 83).....	29
DOSAAF AND MILITARY COMMISSARIATS	
Commander Discusses Role of 'Zarnitsa' Games (I. Gusakovskiy Interview; KRASNAYA ZVEZDA, 24 Jun 83).....	34

## MILITARY-POLITICAL ISSUES

### NEED FOR CORRECT THEME IN MILITARY TV PROGRAM FOR YOUTH STRESSED

Moscow KRASNAYA ZVEZDA in Russian 2 Apr 83 p 2

[Article by Col Justice P. Goroshko and Lt Col Justice A. Bilokon': "The Legal Theme in the Television Broadcast 'I Serve the Soviet Union!': What Remains Behind the Picture"]

[Text] Recently one of the authors of these lines visited the Central Television. V. Blagochinova, editor of the military-patriotic department, was just having a look at the recent mail for the broadcast "I Serve the Soviet Union!" There were thousands of these letters, from soldiers and their parents, from friends, and from those who long ago served their time or who only were preparing to join the soldiers' formation. This very fact is convincing proof of the broadcast's popularity and the detailed interest of television viewers in the life of our Armed Forces.

There is a broad range of topics which, judging from the letters, beckon quite different people to the home screen when the familiar logo appears on it. The outfitting of the Army and Navy with modern weapons and equipment and the organization of soldiers' leisure time, the progress of combat training and socialist competition, and the soldier's field gear... But there is a topic for which an interest is apparent or surmised in almost every letter--the topic of efficiency, discipline and firm military order. This is natural. When people speak about our Army as a school of indoctrination, by and large they specifically mean its inherent precise tenor of everyday life and order throughout. This is achieved largely thanks to servicemen's high legal culture, skilled legal indoctrination of the personnel and well organized legal propaganda.

Just how is this topic handled in the broadcast for and about soldiers?

It cannot be said that it is ignored. "My son writes that the Army has ideal order, that only there can one become a real man--strong, knowledgeable, composed and at the same time friendly and generous," Z. Zemnyukhova from Bashkiriya informs the broadcast's creators and adds with satisfaction that with their help she can become convinced of all this with her own eyes. V. Gulimanov from Krasnodar Kray, whose brother even today is in formation, is preparing himself for the call-up with consideration of what he has seen on the television screen. Nevertheless it also would appear to be incorrect to say that all opportunities have been used to propagandize the tenor of military life and requirements it places on servicemen.

As workers in the military-patriotic department themselves admit, the motif of regulation exactingness, legality and law and order among the troops is perceived "behind the scenes" as it were, and goes without saying in arranging a particular subject. But one would like to have the word about the law and regulation not only to be heard in reality; it should also shape the visual level of the broadcast. First of all this will increase its cognitive values considerably, and secondly and most important, it will reinforce the broadcast's indoctrinational importance, effectiveness and practical help for commanders and political workers.

Just what keeps things from being done specifically in this way? Probably only the uncommon nature of the very combination of concepts of "soldier" and "law" for department workers and its chief, M. Leshchinskiy, within the framework of the broadcast which they prepare. By the way, Mikhail Borisovich in the past also was a serviceman. He has a good knowledge of the modern Army and recognizes the need for the broadcast to penetrate deeper into its life, but he has not yet studied "approaches" to the legal topic. Meanwhile there already is much experience for executing this topic on the blue screen.

Let's begin if only with what has been mastered directly by Central Television. Following the journal "Man and the Law" there also appeared here an educational broadcast on fundamentals of Soviet state and law, and a cognitive broadcast for the youth entitled "Do You Know the Law?" Each one contained many interesting forms of presenting complicated material. Once even the Hare and the Wolf from "One Moment Please!", well known to everyone, acted as "negative characters." Later the young television viewers were told to answer the question of what rules which are mandatory on the drill field were violated by the heroes of the cartoon during their entertaining chase through a construction site.

It is understandable that the military-patriotic topic demands considerably greater severity and constraint for its resolution. Far from everything used by the authors of these broadcasts is suitable for the broadcast "I Serve the Soviet Union!" In the given case we wanted merely to illustrate the truth that "approaches" to a topic can be found by one who looks for them.

By the way, many of the country's television studios also have gained experience in handling the military legal topic in a direct presentation, as they say. One of the pages of the journal "Man and the Law" of Gomel Television, for example, was devoted to the fall call-up of young men for active military service. A talk about the call-up procedure and the initial moment of military service was carried on by garrison military procurator Col Justice I. Kurdesov. I. Matarasov, a worker of the oblast procurator's office, came to help the military lawyer to ensure that his presentation corresponded to the specific nature of television and did not sound didactic. And so an interesting discussion of two colleagues engaged essentially in common work took place on the screen, and this predetermined the viewers' interest in the broadcast.

Maj Gen Justice A. Polonskiy spoke over Kuybyshev Television with an explanation of the procedure for submission and resolution of letters and petitions

of servicemen and members of their families. Here too the comrades approached the matter imaginatively. Clips from training films of the USSR Ministry of Defense Film Studio were used to illustrate what the lawyer was saying. Letters which come to the television studio indicate that the broadcast generated broad interest in the viewers and was greeted by them with gratitude, for the people simply did not know some of the provisions of laws.

Local television in a number of garrisons has gained a certain amount of experience in propagandizing law for the military audience. In one garrison for example television viewers regularly see broadcasts of "Man, Society and the Law" and "Legal Knowledge for the Youth." The commanders of foremost subunits, political workers and military lawyers act as the moderators and other participants of these broadcasts. Residents of a military post already speak of Maj Justice P. Lutsenko, who appears especially often on the screen, as their acquaintance and a good adviser on the most varied legal matters.

So that if someone does still have doubt concerning the possibility of the rubric "The Soldier and the Law" appearing on television, it is only from a lack of information. Such a rubric already exists.

It is another matter that propaganda of legal knowledge in general, and of military law in particular, requires a very serious approach and a consideration of many factors. Mistakes, miscalculations and even slight inaccuracies here are absolutely inadmissible. This is why it would appear apropos to mention the deficiencies of such propaganda here as well.

Not long ago the following scene was heard on one radio play. An NCO was teaching a private to go quickly to bed at the command "Retreat." One of the trainees lags behind his comrades. Then the NCO lights a match "for graphic effect" and tells him to get undressed before it goes out.

We are sure that those who know our Army's life will have serious doubts as to the possibility of such an episode occurring. If such a thing seemed possible then one might as well not smile, but demand a strict accounting of the NCO for nonregulation methods of training subordinates. Alas neither the author of the radio play nor those who put it on the airwaves gave a thought to the legal aspect of those relationships among servicemen which they had set about to propagandize. It was only after critical remarks on this score that the described scene was excluded from the play.

It was also then that one other episode was corrected. You see, in order to best prepare the young generation for service a platoon commander decided to delay the release to the reserve of the NCO with whom we already are familiar. The fact is, however, that the platoon commander had no right to do this even out of the best motives, since by law only the USSR Minister of Defense is authorized to keep servicemen on active military service for a period up to two months.

In short it is of course no simple matter to prepare a good television broadcast on a military-legal topic which is useful in all respects, just as it is no simple matter, by the way, to prepare any broadcast.

There was a discussion of all this in Ostankino when a representative of the Chief Military Procurator visited there. The discussion would appear to be beneficial for all: for the creative workers of the military-patriotic department of TsT [Central Television], who still have not completely sensed the abundant opportunities of what is for them a new topic; and for the military lawyers who probably should offer their services more often to propagandists, help them explain specific legal standards and supply them with what is in their view instructive facts. And the visit to Ostankino of course could have occurred earlier. By the way, judging from everything, both Mikhail Borisovich Leshchinskiy and workers of the department he heads were interested by the announcement of a new film by the USSR Ministry of Defense Film Studio entitled "The Men Leave in the Fall." As was stated, this film, in which many problems current in Army life are resolved by artistic means, possibly will become grounds for a serious discussion about these problems in the broadcast "I Serve the Soviet Union!"

These notes were dictated by concern for having everything happen in that way and for other swallows to follow the first one.

6904

CSO: 1801/403

MINISTRY OF DEFENSE AND GENERAL STAFF

SUCCESS OF A MOD WOODWORKING COMBINE NOTED

Moscow KRASNAYA ZVEZDA in Russian 7 Jun 83 p 2

[Article by S. Lagodskiy: "The Concerns of a Collective, In Our Military Enterprises"]

[Text] The products of the woodworking combine managed by Colonel Engineer G. Golubev enjoy great demand throughout the armed forces. Good-quality folding chairs, cabinets, tables, armchairs and club and sanatorium furniture find their way from here to a great many military districts. This enterprise of the USSR Ministry of Defense's Main Billeting Directorate is at the same time an experimental enterprise. One will find a great many technological innovations here, more finely made products receiving their "clearance for takeoff" here.

"Our combine is now beginning mass production of new models of furniture," says V. Sergeyev, an employee of the Soviet Army and secretary of the party committee here. "Semiautomatic lines for the first phase of a production assembly line have been brought into operation. This will make it possible for us to double our output."

The air in the assembly shop is as if permeated with the pungent smell of wood resin. The vast, well-lit facility is lined with neat rows of billets. As they make their way through the lines of machines they are transformed into chairs, tables and armchairs. Heading the shop collective here is Soviet Army employee V. Podushkin. He started working here as a shop helper back during the war in 1943 when after being seriously wounded he was unable to return to active duty. The shop here is one of the best in the combine; it invariably leads in socialist competition. It was right here in this assembly shop in January of last year that the work group lead by Ye. Kudina become the first in the enterprise to change over to the new brigade labor method. Some 60 per cent of the combine's workers are now already included in this innovative new labor organization and wage system.

"Quite frankly, though, the labor input factor [koeffitsient trudogo uchastiya] was at first not to everyone's liking," the shop chief says. "Workers who were careless or who were guilty of breaches of labor discipline right away found themselves losing substantial sums in wages."

"On the other hand, many of them have now come to see things in their proper light," Yekaterina Dmitriyevna Kudina points out, joining in the conversation. "In fact, they have all increased their output. We believe efforts to tighten labor discipline should be integrated efforts, and this would include paying a worker in strict accordance with his own personal contribution to the overall effort."

The furniture makers here have enthusiastically joined in the competition initiated under the slogan "25 weeks of shock work for the 25th anniversary of the communist labor movement." M. Shirokova, N. Myagkov and many other Soviet Army workers have undertaken greater obligations. The newer workers are trying not to fall behind the veteran production workers here. The shop chief has this to say about one of them, Sergey Alekseyev, one of the finishers: "Even though he's new here, he does good work, clean work, as we say here, that is, no defects, a conscientious worker." Sergey is being called up for his army service in the fall, and after completing his enlistment he has firmly resolved to come back to his old job here with this collective.

The combine recently held workers meetings to discuss the draft of the USSR law on work collectives. These were businesslike, yet enthusiastic exchanges. They generated no small number of suggestions concerning various aspects of the life and activities of a work collective.

Many recall, for example, what V. Artemenko said; he's a young section foreman, an expert at his job and a skillful supervisor. He suggested that the legislation include a provision holding each worker as well as the collective as a whole responsible for the efficient utilization of facilities and equipment. This is a timely question for the combine here for a variety of reasons.

The fact is that some really costly equipment has been standing idle out on the combine grounds for several years now. The reason is that the construction organizations headed by Colonel Engineers Yu. Andreyev and V. Urusovskiy have been entirely unable to complete work on the combine's modernization project. All deadlines have long since passed, but this facility is obviously still on the builders' schedule of "low-priority" items.

The delays the combine is encountering in completing its modernization are hurting its customers: it is unable to satisfy all requests because it lacks adequate production capacities.

"We've still got a long way to go," says the combine's director, Colonel Engineer G. Golubev. "We've got to complete this modernization project, which will permit us to raise labor productivity at each workplace and cut down our waste volume. We have yet, unfortunately, to eliminate all instances of absenteeism and disruptions of production schedules."

Yes, proper attitudes toward one's job and an objective, exacting analysis of the situation prevailing within the facility here are particularly important just now. So much the more is this true for a collective which in terms of work performance over the first quarter of 1983 came in second in competition against allied enterprises. Not to rest on any laurels is in the tradition of a winning combine.

8963  
CSO: 1801/357

## ARMED FORCES

### MILITARY AGRICULTURAL COLLECTIVES DISCUSSED

Moscow ARGUMENYY I FAKTY in Russian 14 Jun 83 p 2

[Interview of Col Gen I. Isayenko, chief of the Central Food Administration, by ARGUMENYY I FAKTY correspondent: "From the Army to the Economy"; date and place not specified]

[Text] Our correspondent V. Voronetskiy met with Col Gen I. Isayenko, chief of the Central Food Administration, USSR Ministry of Defense, and asked him to answer some questions of interest to the bulletin's readers.

[Question] Ivan Danilovich! Tell us, please, what tasks have been given to the agricultural enterprises of the Ministry of Defense and the units' subsidiary farms, in connection with implementing the Food Program?

[Answer] In brief, these tasks are to significantly increase the contributions of army and navy personnel in producing a number of food products, and thus help the people and state supply the Armed Forces with everything they require.

For the Armed Forces, which are fulfilling the responsible task of reliably defending the peaceful labor of the Soviet people, last year was also marked by further development of agricultural production, better use of food resources, and by the struggle of the troops, workers and employees to economize and save in the broadest sense of the word. Much was done to strengthen the material and technical base of agricultural enterprises, and improve transport and storage of food supplies.

[Question] What specific facts and figures can you cite which characterize this work?

[Answer] The contribution of military sovkhoses to supplying the army with food has been appreciable. It is enough to say that sowed areas alone increased by 6,000 hectares during the year, including 1,000 hectares on irrigated land. Livestock barns were built for 28,500 head of cattle and 350,000 domestic fowl. Deliveries of tractors, trucks, other equipment and mineral fertilizers to farms have increased. The number of storehouses on the farms has significantly increased, as have convenient railroad spur tracks. All

this permitted an increase in the production of potatoes by 11 percent, vegetables by 13 percent, meat by 8 percent and milk by 6 percent over 1981 production.

Today our specialized farms have numerous herds of cattle and a large number of swine, sheep and poultry. Many of them are also involved in fish farming and rabbit breeding. The soldier's table is getting more and more hothouse vegetables and greens.

I would especially like to mention the production successes in farming and animal husbandry attained in the military sovkhoses of the Kiev, Odessa, and Moscow military districts and the Northern and Baltic fleets.

Our subsidiary farming has become considerably more active. /The army and navy have increased the number of military units which completely meet their own cropping and animal husbandry needs./ This is especially characteristic of the Moscow, Baltic, Belorussian and Volga military districts, where more and more complete subsidiary farming is appearing.

Whereas isolated units and subunits previously succeeded in producing agricultural products, now it is the norm for many units to attain high indices in this important matter. The Moscow Military District subsidiary farms obtained more than 41 kg of meat per assigned individual. The Strategic Rocket Forces attained approximately the same indices. In fact it has been shown here that the planned target of producing 15 kg of meat per assigned individual in 1985 is completely within reach.

The number of military collectives which are completely self-sufficient in meat during the year is increasing. They include the Kiev Military District cooks' school. It now requires no outside deliveries **either** of meat, or of potatoes and vegetables. One unit last year obtained 80 kg of meat, 3 kg of fish, 11 kg of milk, and 30 kg of vegetables per person from subsidiary farming.

The exhibitions of the achievements of subsidiary farms, which took place in autumn of last year, played a large role in making more active the agricultural enterprises in military districts, groups of forces and fleets. They also graphically demonstrated the opportunities that military collectives have to produce various agricultural products, and, very importantly, the regard which commanders have for this area of activity, for which they are directly responsible.

Overall, the subsidiary farms in units, establishments, military training institutions and military enterprises increased the production of meat for the year by 14.4 percent and that of potatoes and vegetables by 12 percent.

Attention is also being devoted to developing the private plots of the families of workers and employees. During the year they produce 3,000 tons of meat, 18,500 tons of milk, and 7.5 million eggs. In other words, their contributions to improving the food situation is appreciable.

[Question] It is apparent that much has been done. But what problems still need to be solved?

[Answer] Realistically evaluating our achievements, we see that much still remains to be done to increase the capabilities of military agricultural enterprises, and mechanize and automate all production processes. It is also necessary to further increase sowed areas, head of cattle, and feed procurement. Appropos of this, with the increase in available equipment and agricultural crops in our sovkhoses, it has become possible to create a guaranteed feed supply. Therefore, we have set a task at present for each farm to make enough feed for its collectively owned cattle, and for that cattle owned by workers and employees.

In some military districts we still have farms which are lagging. I would especially like to emphasize the need to bring these farms up to the level of the advanced. Opportunities to improve their work exist, most importantly through better use of the land, fertilizer and equipment.

An analysis of the work of the agricultural enterprises and subsidiary (kitchen) farms for 4 months of this year shows that the pace of spring field work was significantly faster than the same period of last year. For example, sowing of early spring crops was done well and completed in 5 or 6 days.

The transfer of cattle to summer pastures has been accomplished everywhere. I must say that winter quartering of cattle was carried out better and was better organized this year. In sovkhoses alone the number of cattle increased by 2,000 head, compared to the same period last year.

Bourgeois propaganda attempts in vain to show that the goals of the Food Program cannot be attained. The selfless labor of the Soviet people is the reliable guarantee of its successful implementation. Remembering this, the collectives of military sovkhoses and subsidiary farms are now working to obtain the planned harvest, improve the productivity of cattle and poultry, and increase the production of meat, milk and eggs over the level of the 10th Five-Year Plan. Fulfilling these tasks will be our new contribution to improving the supply of food for the country's Armed Forces.

9069  
CSO: 1801/373

## ARMED FORCES

### RULES, REGULATIONS FOR MILITARY AND MILITARY-RELATED PERSONNEL

Moscoe KRASNAYA ZVEZDA in Russian 31 May 83 p 2

[Article: "Legal Information"]

[Text] A Ship's Flag for the Internal Troops

/The USSR Council of Ministers has established a naval flag and banner for ships (boats) and vessels of the Internal Troops of the USSR MVD/. The flag, flown on the stern, consists of a bright red piece of cloth (conforming to the color of the insignia worn by personnel of the Internal Troops). The Navy Flag of the USSR is depicted on the edge (top corner near the flagstaff). The Navy Flag of the USSR is depicted on the bright red banner near the boltrope (at the edge where the flag is attached).

#### The Nonstandardized Workday

/The procedure for establishing nonstandardized workdays has been defined for the workers of military units, installations, military educational institutions, enterprises and organizations of the USSR Ministry of Defense (civilian personnel)/. The list of positions for which such a work schedule is established is determined on the basis of our laws and in coordination with the trade union committees by the appropriate commanders and chiefs for each calendar year. The amount of additional leave time for a nonstandardized workday (6 or 12 workdays) is indicated for each position and depends upon the degree of intensity of the work performed by the specific worker and upon the nature and the amount of work he performs.. Such additional leave is not granted to those who have the right to annual leave of 24 days or more or to those who receive additional leave time of 12 days or more in connection with hazardous working conditions, as well as to certain other workers.

Workers with a nonstandardized workday may only be called upon to work overtime in certain cases of production (or service) need.

#### For Health Treatment and Vacationing with Children

/The procedure has been established for receiving health treatment and vacationing for servicemen with children at military sanatoria and vacation facilities/. Children 5 years of age or older who are dependents of generals, admirals,

officers, seagoing and shore-based warrant officers and career servicemen and are listed in their personal records are eligible to stay at such health facilities. Children between the ages of 5 and 16 years are accepted only when accompanied by their parents. The children's expenses are paid in the amount of 50 percent of the total cost. The parents bear full responsibility for the children and for their observance of the regulations in effect at the health facility. Children are authorized to travel to and from the place of treatment (or vacation) at the expense of the USSR Ministry of Defense.

Parents with children are housed and fed separately from the other patients and vacationers at sanatoria and vacation facilities with arrangements for the treatment and vacationing of servicemen with children. Playgrounds and rooms are set up and appropriate mass sports and cultural and educational work is conducted there. Medical records are not kept for children arriving with their parents. Specialized treatment for the children of servicemen is performed under the previously established procedure.

11499

CSO: 1801/387

## ARMED FORCES

### NEED STRESSED FOR COMMANDERS TO ACCEPT AUTOMATED CONTROL SYSTEMS

Moscow KRASNAYA ZVEZDA in Russian 12 Jul 83 p 2

[Article by Col Gen Arty L. Goncharov, candidate of military sciences: "New Weapons and Tactics: The Commander and Automatics"]

[Text] Requirements for organization of the control of combat to destroy enemy air attack weapons are rising significantly under present-day conditions. An enormous data flow must be processed and interpreted in the shortest possible time in order to estimate accurately the fast-changing air and ground situation, make a substantiated decision and implement it promptly.

No matter what professional expertise a person has, this is now coming to be beyond his capability. Means of automation which substantially reduce the time of data passage and processing and which increase its accuracy have come to his aid. In other words an opportunity to ensure sufficiently effective control of air defense forces and weapons arises with the use of automated control systems (ASU).

In principle the matter seemingly is solved, but with the introduction of ASU and the creation of automated work stations (ARM) the functional duties of operators change and the demands rise on the level of their specialized and tactical knowledge. The work of the commander as the organizer for combat also changes fundamentally. Many difficulties, including of a purely psychological nature, arise in this connection at the stage where commanders master ASU's which are new to them. It happens where one commander has doubt as to the validity of information being put out. Another officer fears that the ASU suddenly may malfunction and he sets up a portable plan position indicator next to the new equipment, as if to say: Even though the equipment is old, it is reliable.

I recall an instructive example. An interceptor aircraft was being vectored to the target with the help of an ASU. The guidance failed. They repeated it a second and a third time and the result was the same. What was the matter? A detailed analysis allowed the reason for the failure to be found. It turned out that the pilot did not trust the automatic equipment very much and corrected commands being issued by the ASU with the commands of the fighter control, which had stable communications with him. Since this correction had a time delay there was no accurate guidance, which was guaranteed with proper use of automatic means.

It stands to reason that it is not simple to step over the psychological barrier. This task is accomplished most successfully by the officer who thoroughly masters the automated control method.

For example, the crew of the command post which was headed until recently by Officer I. Miftakhov constantly achieves high effectiveness of tactical control using the ASU. In our view the path to these successes is very instructive. In becoming familiar with what was for them a new automated system, the officers of this command post initially doubted that they would succeed in mastering machine language, by which two-way interworking between man and automatics is accomplished, in a short period of time. Some of them believed that due to the large number of ASU symbols and signs it would not so much help the commander and his crew in developing a decision for combat as complicate their actions. But these doubts soon were dispelled. Practice played a large part here.

...A drill was under way, with the air situation becoming continuously more complicated. Then, choosing the most intense moment, the inspector used his narrative problems to disable the command post crew.

But the fight continued. The ASU "took" control into "its hands" and the missilemen successfully performed the training mission of repulsing the "enemy" air attack. An analysis showed that all targets which entered the zone of combat actions were distributed very rationally among the weapons. Each weapon was given specifically that mission which could be accomplished with maximum effectiveness.

What is the result? It is possible that those commanders are correct who tried to give up all control of combat "to the reason of automatic equipment"? It should be noted that already today a sufficiently developed cybernetic system can solve a number of control problems without man's direct participation. But as the technical base of the means of automation, the EVM [electronic computer] can model only a portion of human functions. Moreover, it surpasses man only in the speed of solving standard problems.

At the same time, combat abounds in unforeseen, nonstandard situations which cannot be programmed fully and in advance. Therefore it is very important to achieve the harmonious interaction of the commander with the automatic equipment and the rational distribution of functions between them. The leading role in the commander-automatics system remains and always will remain with the commander, who becomes the operator in this system.

"...Even with a high degree of automation," emphasizes USSR Minister of Defense Mar SU D. F. Ustinov, "the dominant role in control always will belong to the commander..."

The professional schooling of the commander-operator forms from his ability to estimate the air situation quickly, logically compare his own decisions with the recommendations of automatics and select those which best conform to the concrete situation. Officer Miftakhov possesses specifically those skills to the full extent. This is also indicated by success achieved by the team he heads during a tactical field fire exercise. In its concluding phase,

when a matter of minutes remained until missiles were launched, a report came in that a group of low-flying targets had been detected. Officer Miftakhov immediately retargeted the weapons without delay and in so doing cancelled the previous decision made with consideration of the EVM recommendation. Only a tactically competent officer who thoroughly analyzes the slightest changes in the air situation and who has a good knowledge of the tactical algorithms of means of automation can function so confidently under conditions of a very acute time deficit.

A commander probably cannot be found now who would have to be convinced of the advantages of ASU over the combat work techniques customary in the past, but already obsolete or becoming out of date. Nevertheless, some officers still are encountered who theoretically understand that it is impossible to attain high results in tactical control without the skilled use of means of automation, but in their practical activity do not make very active use of the automatics.

That was the case at one tactical field fire exercise at the range. It already was approaching the close and many missions had been performed very successfully. Now the outcome of firing depended on how Maj V. Khryapko coped with his duties. It remained for him only to choose the most suitable moment for destroying a practice target, but something unforeseen occurred: The target which was to be destroyed was "lost." This sharply complicated the situation. In such a situation the commander must display initiative and combat activeness, of course on the basis of a firm knowledge of the capabilities of the automated system and means of target reconnaissance.

Maj Khryapko seemed not to get confused and to act coolly, but instead of reporting what happened to the higher CP he began to search for the target independently, using his own radiotechnical means for this purpose. He thus scorned the capabilities of the ASU to provide necessary radar data.

That training mission nevertheless was accomplished, although with lower activeness than it could have been. But very little was required for full use of available capabilities: Select the appropriate ASU mode and the necessary data would have come immediately.

Why did that happen? The fact is that Maj Khryapko had passed appropriate tests and demonstrated a good knowledge of the capabilities of means of automation and radar and methods of using them in various situations, and he had acted well in drills. Then the habit of using old combat work techniques tested many times over got the upper hand in the emergency situation.

Teamwork training of combat crews takes place in various drills under the immediate direction of the commander. It begins with the organization of single-level drills in which the actions of individual members and crews are taken to perfection. It is understandable that the drills produce greatest benefit only if they are held regularly and not in a stereotyped manner, where the situation created in them poses difficult tasks for each specialist and demands the intense work of the mind and resolute actions of initiative.

The practice of troop combat training and results of field fire exercises at ranges convincingly indicate that commanders who have a good personal training and who constantly show concern for the cohesiveness of combat teams and their ability to make effective use of the means of automation cope successfully with assigned missions in the most difficult situation. But it is not yet all commanders who regard regular drills together with their subordinate crews as mandatory for themselves. Such officers rely on the previous store of knowledge and practical skills and usually commit many mistakes in tactical control.

Once staff officers were inspecting the work of a command post team directed by Officer I. Salimov (now released to the reserve). It was known that he had a good knowledge of ASU and previously had used it skillfully in practice combat. But how would things go now? The team took its places and the drill began in repulsing a mass raid by air targets which employed active jamming and all kinds of maneuver.

The very first conclusion was that this was poor coordination at the commander-team level. The specialists did not display activeness or initiative in those situations when it was especially important. The impression formed that Officer Salimov was acting on his own and the team's task reduced only to registering the results of combat. The officer also relied poorly on the ASU capabilities. At times he forgot about it and resorted to its help only as a means of communication with the weapons.

The conclusion was drawn at a critique of the drill that Officer Salimov's poor practical skills were the basis for shortcomings which were uncovered. As it turned out he had removed himself from joint drills with the team.

One also encounters commanders who devote more attention to their personal training and the team's cohesiveness but forget to include supporting subunits in the drills. To what does this lead? To the commanders' poor knowledge of the capabilities and training level of these subunits' teams. It should be remembered that knowledge and especially practical skills connected with the tactically competent use of means of automation can be gained only through joint (comprehensive) two-level drills.

I also would like to pose the following question in conclusion. As experience shows, some of the officers are capable of mastering work on means of automation in a short time while others accomplish this same task over a more lengthy time and, moreover, there often are mistakes and miscalculations in their actions. This is connected above all with the people's psychophysiological features. For this reason it is very important to carry out a thorough selection of officers and ensure their high practical schooling in the interests of optimum resolution of the commander-automatics problem.

6904

CSO: 1801/402

## ARMED FORCES

### DEVELOPMENT, USES OF FIBER OPTICS IN COMMUNICATIONS DESCRIBED

Moscow KRASNAYA ZVEZDA in Russian 6 Jul 83 p 3

[Article by Engr-Col A. Zhovanik, candidate of technical sciences: "Military-Technical Review: The Problem of 'Frequency Territories'; Data Transmitting Beam; Glass 'Fibers' in Place of Thick Cables: Wavebeam Guide Communications"]

[Text] The basic possibility of transmitting signals over a wavebeam guide was proven back at the end of the last century, but the development of a set of fiber-optic means and use of equipment suitable for practical purposes began a little over two decades ago.

The interest in wavebeam guides is not accidental. Requirements for radio channels for communications, television and other systems are so great that "frequency territories," as they are called by specialists, have become among the scarcest and communicators (in the broad meaning of this word) are spending enormous efforts on the fight against the crowded airwaves. The need for large "frequency territories" led to the optical range, where many thousands of television channels can be accommodated freely.

It is generally known that light, like radio waves, is one of the forms of electromagnetic energy and it is also propagated in the form of oscillations which are easy to modulate by changing their amplitude. And so with the help of a beam of light it is possible to transmit messages as by radio with the very same success.

The fiber-optic communications cable represents glass (quartz) light-conducting fibers (wave beam guides) placed in a certain manner around a reinforcing element and covered on the outside by an especially sturdy protective envelope. The latter protects them against destruction during laying and the lengthy effect of all external factors in the process of operation. Capron fibers are used most often as the reinforcing element.

The production of wavebeam guides is based on a simple principle. The glass melt is extruded through openings in a crucible and forms fibers which assume the necessary shape, cool, harden and are wound on a drum. The fiber diameter depends on the extrusion rate of the glass melt and the drum's speed of rotation. The press announced that 250 km of fiber with a diameter of 0.2 mm can be obtained from one liter of glass melt.

The wave beam guide itself is a two-layer fiber consisting of a center (core) and an envelope. Especially pure and transparent materials with a higher refractive index are used to manufacture the core. Propagation of light in the fiber is achieved by multiple internal reflection at the boundary of the core and envelope. Such fibers concede nothing to steel wire of the same thickness in their strength, but they require careful treatment due to excessive fragility (photo 1 [photo not reproduced]).

Complicated problems also must be resolved in creating light cables with low attenuation of signals transmitted along them. Especially pure glass (no more than one atom of admixtures is tolerable per billion atoms forming the glass) as well as special technology for placing the fibers in manufacturing the cable are necessary for such wavebeam guides.

The effectiveness of optical communications lines also depends on light sources being used as transmitters of optical signals. Special light sources (light diodes and lasers) with small dimensions and great brightness have been created recently.

It is natural that new communications systems required creation of light cables, standard transmitting and receiving modules, standardized connectors and terminals, as well as other necessary equipment (photo 2 [photo not reproduced]). A large number of foreign firms, and military departments above all, are engaged in solving all these problems.

Here are a few figures published in foreign journals, and particularly in ELECTRONIC DESIGN. The onboard EVM [electronic computer] of a contemporary aircraft weighs 20-30 kg and the weight of the set of cables leading to sensors and displays reaches five tons. This enormous amount arises chiefly because of a need for careful screening of wires which prevents mutual interference by various measurement systems and control systems. Wavebeam guide cables are ten times lighter.

Reviewers also note other factors which force the specialist to find ways to develop these means of communication further. Fiber-optic networks have substantially greater carrying capacity and high data transmission rates, a higher degree of security of the transmission process, and they practically preclude the intercept of these data by a potential enemy using existing technical means of reconnaissance.

It has been reported that in constructing optical networks using wavebeam guides there has been success in precluding the effects of radiation and electromagnetic pulses arising from nuclear bursts on the communications lines, as well as ignition and sparking as a result of their damage. There is a substantial reduction in cost of the light cables resulting from the use of inexpensive raw materials for their manufacture and a decrease in the use of valuable metals.

At the present time an enormous amount of scarce copper and aluminum is being used to manufacture various cables and lines, and lead and special steels are used for protection against mechanical damages, the effect of a corrosive medium and so on.

This does not exhaust the advantages and economic effect in the use of wavebeam guide cables. It is possible to transmit an enormously greater volume of data over great distances through each fiber included in such a cable than through the largest capacity of coaxial radio-frequency cable. The distance between repeater stations increases by dozens of times, which also provides for a saving of resources by reducing the number of repeaters and spaces for accommodating them.

The wavebeam guide communications network developed for the deck-based A-7 Crusader attack aircraft (United States) can be given as an example. The weight of light cables used in the aircraft is 21 times less compared with electrical wiring, and the energy losses in the lines are reduced to 2.8-3.5 db per kilometer of length. Specialists of the International Business Machines Corporation firm assume that it is most advisable to use fiber-optic means aboard aircraft in increasing the band of frequencies transmitted from 1.0 to 10-15 MHz. The firm developed an onboard light-cable line 15 m long with a bandpass of 25 MHz, in which new light diodes are used as transmitters and more sensitive silicon photoelements are used in the receivers.

As the foreign press reports, the aircraft carriers "Kitty Hawk" and "Constellation" use closed state optical cable communications networks which provide for shipboard communications and the transmission of a large number of television programs, stereophonic radio broadcasts and other data. The journal NEWSWEEK announced that a fiber-optics system has been developed for the U.S. Army for remote guidance of antitank guided missiles. A battlefield image taken by a television camera installed in the missile warhead is transmitted over a light cable, over which flight control commands also are passed.

The United States and a number of other countries are developing fiber-optics systems for field communications networks set up for weapons control and at control points, as well as long-range (main) optical communications lines. Such work is being carried on in Japan, England and Canada. Japan, for example, has created an experimental line 18 km long and a high-speed line (400 million bits per second) 80 km long. England is testing a marine wavebeam guide cable, the linear amplifiers of which are located every 30-35 km and their electrical power is supplied over metal lines passing within the cable. A similar line 3,200 km long is to begin operation this year in Canada.

Foreign military specialists are showing an interest in fiber-optic display boards for displaying the operational situation. It is assumed that with low energy consumption it will allow a rapid change in the kind of data recreated (color image, text, diagrams and so on). Light cables are planned for use to transmit images with higher resolution (100-150 lines per centimeter), for coding and decoding radar and television data transmitted from aircraft and satellites to earth, for identifying targets and in other fields.

An enormous arsenal of means has been created and is functioning on the basis of fiber optics and communications satellites which allow establishing contact with subscribers at any point on the globe as well as in aerospace. It is through these means that U.S. and NATO military circles hope to provide stable control of combat operations.

## ARMED FORCES

### THOSE DESIRING TO BECOME MILITARY OFFICERS MUST POSSESS REQUISITE QUALITIES

[Editorial Report] Tashkent YOSH LENINICHI in Uzbek on 21 April 1983 carried on page 4 a 1,300-word article by M. Hakimov (Bukhara Oblast Military Commissar, Colonel) titled "The Borders of the Homeland Await You." The article is written for those considering a career as a military officer. A substantial part of the article is devoted to naming successful military officers from Bukhara Oblast and telling briefly about their careers. Rashidov's comments at the republic Komsomol Central Committee Plenum on the importance of preparing candidates for study in military education institutions are recalled. Dozens of individuals from Bukhara Oblast are presently studying in such schools.

"Today many of the youth of our oblast are expressing the desire to enter higher command and engineering education institutions for study. But the desire in itself is not enough.... It is necessary to master the secondary school program in the highest degree. Otherwise it is difficult to achieve success on the entrance exams. Besides this, they have to pass the physical preparedness exam as given in the GTO requirements.

"Those young people who express a desire to enter military education institutions can become acquainted with the entrance procedures and rules at city and rayon military commissariats.

"A firm grasp of the Russian language acquires primary importance for youth of the local nationalities. This is because all of the USSR Armed Forces' life, leadership and encounters take place in Russian. Therefore, prior to the beginning of entrance exams on 15 July, everything must be done in order to master Russian, and likewise such subjects as mathematics, physics, literature, history and geography."

CSO: 1836/20

## ARMED FORCES

### MILITARY EDUCATION IN SAMARKAND OBLAST

[Editorial Report] Tashkent YOSH LENINCHI in Uzbek on 7 April 1983 carries on page 3 a 1,300-word article by P. Rajabov (Military Commissar of Samarkand Oblast, Lieutenant Colonel) titled "Defense of the Homeland--Supreme Duty." The article concerns several aspects of military education and preparation for higher military education in Samarkand Oblast. In the newspaper's introduction to the article it is pointed out that based on the ideas in Sh. Rashidov's speech at the Uzbekistan Komsomol Central Committee's 4th Plenum, Komsomol organizations are "giving serious attention to teaching young people the Russian language, tempering them physically and propagandizing the profession of officer among graduates of secondary schools and trade-technical educational institutions." Rajabov points to the need for a strong armed forces in the context of the threat by imperialist powers. "Creating in youth high moral patriotism and psychological qualities, and arming them with knowledge, skills and habits are considered necessary factors of preparation for defense of the socialist homeland. It is extremely important for draft-age youth to have profound ideological conviction and to be loyal without end to the homeland. As noted at the 26th Party Congress, it has become and will remain one of the party's most important tasks to establish in the consciousness of workers, and above all of the younger generation, ideas of Soviet patriotism and socialist internationalism, feelings of pride in the land of Soviets and in the homeland, and feelings of readiness to defend the victories of socialism.

"This year, as in the rest of our country, in our [Samarkand] Oblast, too, we held a week of mass-defense measures dedicated to the 65th anniversary of the Soviet Armed Forces. It became a clear display of our work conducted in the field of military patriotism. But we cannot say that it was conducted successfully in all rayons of our oblast. If we had been able to organize it well, we would have achieved greater results in our preparation for military service."

The article notes some success in preparing youth for military service, in selecting candidates for entrance into military education institutions and in arousing love toward the profession of officer among young people. Such measures as lessons of bravery and "Days of Recruits" have become widespread. Veterans of World War II and heroes of labor have been active in these and other activities.

"Along with other areas of military patriotic training, the matter of arousing particular love among youth for the profession of officer was given great attention at the 4th Plenum of the Uzbekistan Komsomol Central Committee dedicated to further strengthening the military-patriotic and physical training of youth and to the republic Komsomol committees' tasks in preparing them for service in the ranks of the USSR Armed Services in accordance with the resolutions of the CPSU 26th Congress and the Komsomol 19th Congress. Indeed, among school pupils and students of higher educational institutions many young people were found who desired to become military cadres. Our task is to help in all ways.

In order to achieve visible results in helping young people of the local nationality enter military education institutions, it is appropriate for every school, tekhnikum and trade-technical education institution to prepare one of its best graduates. They must be given Komsomol orders. The military commissariats must take strict account of such youth, and follow their successful taking of entrance examinations. Study in Soviet military education institutions is a great honor, because that is where the gold fund of the armed forces--commanders and political cadres--are prepared. It is necessary for every parent to be able to imagine clearly that the student of the [military?] education institution is the pride of our country and a loyal guard.

Acquiring a firm mastery of the Russian language, first-class physical and moral preparation, loyal service to the Soviet people and to the party of Lenin, and protecting the victories of the Great October are the duty of every young person."

CSO: 1836/19

## AIR FORCES

### EXERCISE EMPLOYING MILITARY TRANSPORTS AS BOMBERS DESCRIBED

Moscow KRASNAYA ZVEZDA in Russian 22 Jun 83 p 1

[Report by Maj V. Usol'tsev: "The Transports are Over the Target"]

[Text] The bomber crews were not involved in this tactical exercise. The target situation on the mountain range, however, included targets which could not be attacked by the inadequate number of helicopters or fighter-bombers. According to the exercise specifications, these were powerful fortifications, and large-caliber HE aerial bombs would be needed to destroy them.

The mission of bombing the "enemy's" fortifications on the range was assigned to the crews of two air transports. There is no need to point out that this was an unusual assignment for those accustomed to hauling cargo over great distances, to dropping or landing airborne forces. These are not simply transport fliers, however. They are military pilots, and they therefore assess any assignment, even the most unexpected, as a combat order and immediately take all steps necessary to carry out the mission in the best possible manner.

They did so this time as well. Upon receiving and clarifying the mission, the airmen set about preparing for the flight with a great sense of responsibility. The crew commanded by Captain S. Repin was named the lead crew. He precisely defined the procedure of operations on the route, in the target area and on the bombing run for each crew member and conducted drills for them. Captain A. Trifonov, assistant aircraft commander, Senior Lieutenant V. Klipa, navigator, Captain of Technical Service L. Kozlov, aircraft technician, Warrant Officer A. Tokarev, aircraft mechanic, and Warrant Officer N. Kuryatov, radio operator, worked hard and with great enthusiasm to prepare for the difficult assignment.

The airmen made a thorough study of the tactical situation on the route and in the target area, the situation at the range and the special equipment, a conveyor, installed in the cargo compartment for dropping the bombs. The procedure was practiced for using the weapons. The aircraft navigator and technician had an especially difficult mission. They were charged with responsibility for the accuracy of the bombing and for the troublefree operation of the equipment. The commander therefore checked out their readiness with special thoroughness.

Now the heavy aircraft loaded with bombs set out on a course toward the mountain bombing range. Evening was approaching. A bluish haze hung over the mountains,

concealing the outlines of the reference points on the ground. Officer V. Klipa, military navigator 1st class, however, brought the pair of transport aircraft precisely to the bombing range. He gave his report: "Comrade commander, 3 minutes to the target.... Course.... Speed...."

The tense seconds dragged on. Now the navigator gave a new report: "On the bombing run"! Captain S. Repin flew the red-starred aircraft literally along a thread. He was now maintaining the flight parameters with scrupulous precision. Senior Lieutenant Klipa pressed against the radar viewing hood of the sight. From their stations the other crew members were staring intently at the polygon of a "fortification" drifting toward them. The target was in the cross-hairs. There was not need to make adjustments for the wind. It was calm. The navigator's command "Release bombs!" came like a shot. The conveyor started up. The heavy HE bombs rushed downward. With a sharp turn Captain Repin took the "bomber" out of the target area. According to the exercise specifications, there were many "enemy" air defense weapons in the area. The flight operation officer at the bombing range soon announced: "Good going! All of the bombs were right on target"!

The second crew also dropped its bombs successfully. When they landed, the exercise supervisor praised the airmen for the precision of their strike. "Just like real bombers," the general said. Captain admitted for the first time in front of his colleagues; "Some of us piloted bombers, Comrade General." And Repin had indeed formerly trained as a pilot for the bomber aviation. As it turned out, however, he flew first on a liaison aircraft and then a transport. He retrained on the new type of aircraft, became an aircraft commander and on the long flights and difficult assignments he rarely thought about the bomber. He had now had to turn to his former skills, however, to use his former know-how to prepare his men to perform the unusual assignment.

The tactical flight exercise continued. Repin's crew had to perform yet another, perhaps equally difficult, assignment--to deliver military cargo to a landing strip of limited size, dwarfed in the mountains and with extraordinarily difficult approaches. The crew successfully coped also with this mission, however. But even the so-called ordinary, everyday flights of the transport airmen are never easy. These are real toilers of the skies.

Captain S. Repin has been awarded the Order of the Red Star for his successes in the combat training, for his skill and courage.

11499  
CSO: 1801/384

## AIR DEFENSE FORCES

### MAR AVN KOLDUNOV ON ROLE OF AIR DEFENSE FORCES

Moscow VOYENNNYYE ZNANIYA in Russian No 4, Apr 83 (signed to press 11 Mar 83)  
pp 1-2

[Interview with Aleksandr Ivanovich Koldunov, marshal of aviation, commander-in-chief PVO [Anti-aircraft Defense] Forces, USSR deputy minister of defense, by an unidentified correspondent of VOYENNNYYE ZNANIYA, appearing in article "Guarding Our Aerial Borders"; date and place not specified]

[Text] The famous aerial warrior of the Great Patriotic War, twice Hero of the Soviet Union Aleksandr Ivanovich Koldunov received his wings in the Reutov (Moscow Oblast) aeroclub Osoaviakhim, then completed the Kachinskaya military aviation flight school. From May 1943, at the Southwestern and 3d Ukrainian fronts he completed 358 combat missions, took part in 96 air battles, and personally destroyed 46 enemy aircraft.

Currently, Mar Avn A. I. Koldunov is commander-in-chief of PVO Forces and USSR deputy minister of defense. Our correspondent asked him to answer a few questions.

[Question] Comrade Marshal of Aviation, in April troops in the anti-aircraft defense forces will celebrate a holiday--PVO Forces Day. With what successes will they greet this holiday?

[Answer] Being deeply aware of their role in the affairs of protecting peace and socialism, lofty tasks charged by a resolution of the 26th Party Congress, the November (1982) Plenum of the CPSU Central Committee, and a report by the General Secretary of the CPSU CC Yu. V. Andropov at the ceremonial meeting of the CPSU Central Committee, the USSR Supreme Soviet, and the RSFSR Supreme Soviet, dedicated to the 60th anniversary of the founding of the USSR, the PVO forces, as with all armed forces personnel, continuously increase their vigilance and combat readiness, and faithfully defend the security of our beloved Motherland.

The Soviet Union firmly and continuously pursues the policy of strengthening the peace and security of the people. However, as was noted at the ceremonial meeting in the Kremlin Palace, in the sessions of 21 December 1982, let no one be mistaken: we will never allow our security or the security of our allies to be threatened.

One of the guarantees of that is the daily, persistent study of combat equipment and weapons, their expert operation, and competent application by the soldiers, sergeants, warrant officers, and officers of the PVO Forces. Many troops in PVO have been decorated with orders and medals for successes achieved in military and political training and for vigilant performance of their military duties. With great honor they deserve the highest trust of the party and people. Sparing neither strength nor, from time to time, lives, they accomplish their difficult, but honorable duties as defenders of the skies of the Motherland.

[Question] And now, Comrade Marshal of Aviation, I would like to ask you to return to the past in anti-aircraft defense. Please, could you briefly describe how it originated and how it developed?

[Answer] Personnel in the PVO Forces take pride in the fact that one of their founders was the great Lenin. During the civil war, when the necessity arose to protect such centers as Petrograd, Moscow, Tula, Baku, and Astrakhan from attack by enemy aircraft, by the personal order of Vladimir Il'ich fighter aviation detachments and anti-aircraft artillery subunits were formed, which made a sizeable contribution to the destruction of the White Guards and interventionists.

The Great Patriotic War became a stern test for PVO troops. The anti-aircraft defense of Moscow is an example of the dependable defense of a large political and industrial center, built on the close interaction of all forces and means of PVO. Hitler's plan to destroy our capital by surprise massed air strikes was spoiled. The enemy lost 1,300 planes on the approach to Moscow. The gunners and pilots of the PVO inflicted heavy losses on enemy aviation in battles near Leningrad, Stalingrad, Kursk, on the Dnepr, and in other operations. Our troops, in the years of the Great Patriotic War, accounted for the destruction of more than 7,300 enemy planes. The heroic deeds of more than 80,000 PVO troops were recognized by orders and medals, 92 of which were awarded the title Hero of the Soviet Union, and guards fighter pilot Captain A. Karpov was twice decorated with the Hero's Gold Star. Twenty-nine formations and units were reorganized into Guards, and 11 received honorary designations. The heroic deeds of the troops in the old generation of anti-aircraft defense are inscribed in gold letters in the military history of the Soviet Armed Forces. The experience of the last war is indeed invaluable. Those who today maintain the peaceful skies of the Motherland turn to it frequently. From their fathers and grandfathers they learn of supreme love of the Motherland, devotion to the Communist Party, the highest vigilance, to conquer a strong enemy with skill, and of the readiness to immediately rebuff any aggressor.

[Question] In the post-war years, PVO Forces, as with all the armed forces, were reduced. What is their present structure and combat capabilities?

[Answer] Yes, today they are equipped with weapons that allow them to destroy any means of aerial attack. The troops of the PVO well understand that even in peacetime they continuously fulfill a task of national importance--they are in military service, and that means at any moment they must repulse a surprise attack by a strong, technically-equipped enemy.

The anti-aircraft missile forces (ZRV) possess great fire-power and faithfully defend the aerial borders of our Homeland. Among their armaments are various types of anti-aircraft missile systems capable of destroying aerial targets over a broad range of altitudes and speeds.

The most maneuverable arm of the PVO Forces is fighter aviation. They fulfill their assignment by close interaction with the ZRV and are designated, primarily, for defense of the long-range approaches to defended areas and objects. The supersonic, all-weather fighter-interceptors, equipped with powerful missiles, are capable of intercepting and destroying the enemy at various altitudes and in any weather conditions, day or night.

The radiotechnical troops hold an important place in the PVO system. They continuously perform radar reconnaissance of our airspace in the interest of supporting ZRV and fighter aviation combat operations. In spite of the enemy's electromagnetic countermeasures, our radar stations allow PVO troops to detect current air strike tactics at great distances and over a wide range of altitudes, to continuously track the enemy, and to relay the necessary coordinates for target designation.

A feature of the current stage of PVO Forces development is the future introduction and wide use in all squadrons of automated control systems and high-speed communications. This will allow commanders and staffs to make decisions on a battle most effectively and in the shortest time, and to more fully use the capabilities of anti-aircraft defense.

[Question] Could you tell me, Marshal of Aviation, personally, why did you take up the profession of a military pilot?

[Answer] My youth was in the thirties, when our country found its mighty wings. There was a universal increase in aviation among the young. We hungrily read the reports about the records of Soviet pilots, their courage, and heroism. It's not surprising that dreams about the sky seized me. Having finished at the aeroclub, I decided to go to the Kachinskiy military aviation school. However, I was rejected because at that time I had not yet reached draft age. I sent a letter of appeal to Marshal of the Soviet Union K. Ye. Voroshilov and won his support.

[Question] Young readers of VOYENNYE ZNANIYA are interested, how is success achieved in an air battle?

[Answer] People at times are inclined to attribute the high results of our aces only to luck, and very little to the pilot, to the skill to improvise in a tactical situation. I cannot agree with this. In combat, one has to rely not so much on natural gumption or a lucky break as on well-rounded professional training, knowledge of tactics, on precise computation, and a strong moral-psychological foundation.

I'll tell you of two cases which will graphically confirm this.

Once, our planes covered the troops on the right bank of the Dnepr. Suddenly, an enemy fighter appeared in the sky. Having evaluated the situation, I made

a decision--to attack. The fascist plane was shot down with the first burst. But the Hitlerites pulled in on my wingman's tail. My memory instantly whispered the method that we had worked out earlier. With a high-G turn I managed to get within firing range, and with a short burst I exploded the second enemy plane.

Another time, 6 of our "YaKs" met 12 fascist fighters. The enemy had numerical superiority. However, we had the tactically more advantageous position and decided to strike the Hitlerites, to utterly surprise them, and having stalled them, to take the initiative. This was not reckless daring, I believed in each of my comrades, and knew from an earlier battle just who had what capabilities. And my wingmen believed in me. On the arranged signal we rolled in to attack. We opened fire at short range in order not to miss. We shot down two enemy planes and forced the rest to break off from the battle. Our group did not suffer any losses.

I point out that each soldier can be courageous, brave, and prepared for heroic deeds. But what does it take? If you want to be courageous, constantly study military matters, increase your political knowledge. Overcoming difficulties in daily life is the true school for developing your will, courage, and bravery. Accidental, unplanned heroic deeds don't exist. Furthermore, an ideological conviction is necessary always and everywhere. Only this great goal is capable of giving birth to great energy.

[Question] For conscripts and those in pre-conscript training, Comrade Marshall of Aviation, it would be interesting to find out about service life in the PVO Forces and about what qualities the troops protecting the skies of our Motherland should have.

[Answer] PVO Forces are troops in constant readiness. Our missileers, pilots, radar operators, communicators, and other specialists tirelessly guard the aerial borders of the Motherland day and night, in any weather. Vigilance is the most important condition for the inviolability of our aerial frontiers. PVO troops are deeply aware of this and view military duty with only the highest valuations. Communists serve as an example to each individual.

I emphasize the fact that the PVO Forces today are staffed with educated, technically competent young people. Nearly 70 percent of those draftees coming to us consist of youth with upper and middle specialized education, and many receive technical training in DOSAAF organizations.

The nature of work for technical-engineering specialists has undergone appreciable changes. Joining a battle, the operators of modern PVO radar systems don't see the actual enemy--they deal with symbols: blips on a radar screen. Therefore, it is extremely important that the troops feel the reality of what is going on, are equipped to the limit, and meticulously carry out the operations, outwardly little resembling combat operations.

The serious requirements for psychological training for the PVO specialists are advanced in connection with the necessity of maintaining constant physical

and spiritual mobilization for the course of their military service. Experience shows that the soldier on the battlefield can much more easily make up his mind for a decisive assault or strike than to maintain a state of high readiness for a long period of time. In order to not unnerve oneself, if only to lose the sense of responsibility for a moment, requires a great reserve of spiritual and physical strength. They are acquired during daily strenuous training, field firings, on the ranges, and in tactical exercises whose conditions simulate actual combat as closely as possible.

Commanders and political workers give PVO troops the quality of education necessary for battle. A system of trainers, various simulators, devices for creating jamming, and other technical means allow daily to train the troops under adverse conditions, with full output of physical and spiritual strength. Personnel of the PVO Forces actively perfect their combat skills. "To increase vigilance, to faithfully provide security of the Motherland!"--under this slogan the anti-aircraft defense troops compete, and strive to multiply their military work successes.

COPYRIGHT: "Voyennyye znaniya", 1983

12304

CSO: 1801/334

## NAVAL FORCES

### COMMENTS ON UNKEMPT APPEARANCE OF CREW, CREW QUARTERS ABOARD SHIP

Moscow KRASNAYA ZVEZDA in Russian 23 Jun 83 p 2

[Article by Capt 2d Rank Yu. Timoshchuk: "The Forgotten Crew Quarters"]

[Text] The letter received by the editors from V. Lapshin, Yu. Muntyan and others was full of alarming information. It reported that on the escort vessel on which they had served until recently there were sometimes cases of nonregulation relationships among the seamen, that the organization of the service had to be improved.

So now Captain Lieutenant D. Zubrov, deputy commander for political affairs on the escort vessel, and I were inspecting the ship compartments. We descended into the very first crew quarters, and I could see that the concern expressed in the letter to the editors had not been unfounded. We were met by young Seaman V. Petukhov, duty seaman. His jersey was rumpled and his dungarees had not been washed for a long time. The seaman had been on duty for 6 hours, and he did not know when he would be relieved. It was learned that his relief had been sent to the galley on another detail.

"This was an extra detail which just came up," Zubrov hastened to explain.

Let us assume that this was so. But could extra details explain the disorder in the crew quarters, circumstances indicating an unhealthy climate?

Or take the following incident. Engineer-Captain Lieutenant O. Korotayev, commander of the electrical and engineering division on the ship, had penalized Seaman L. Miskioglu for lack of discipline by depriving him of his regular shore leave. Nonetheless, the penalized seaman attempted, without the officer knowing, to talk the clerk into placing his name on the leave roster. When the young seaman refused to do so, Miskioglu insulted him.

Petty Officer 2d Class A. Yerokhin and Seaman V. Kharchenko have similar infractions on their conscience. Quite frankly, the violators of military discipline are completely at ease on the ship. Paradoxically, it would seem that steps are being taken against them, extremely strict steps at that. Just in the past few months several seamen have been penalized for committing infractions. The number of violations is not dropping, however. Why not? It would not be so very difficult for Lieutenant Captain V. Sorokin, ship commander, Lieutenant Captain

D. Zubrov, his deputy for political affairs, and the other officers to learn the answer to this question. They would only need to take a few steps from their quarters to those of the seamen, where the infractions are committed. They would only need to walk through the quarters, bring themselves down to the level of their subordinates and try to learn what kind of problems the latter have, and a great deal would become clear, many violations in the making could be nipped in the bud.

Let us think a minute about the importance of the crew quarters on a ship. We know that these areas are designated as places where the personnel can sleep and rest when they are off duty. Is this all, though? No, it is not. On any ship, in addition to everything else, the crew quarters are a place where there is active communication among the seamen, where their relationships develop. Naturally, these processes are closely linked to everything occurring in the crew. Life in the crew quarters is, after all, an inseparable part of the general shipboard life.

This is why the veteran navy commanders and political workers always try to visit the crew quarters as frequently as possible and keep a close eye on the moral climate there. This is a typical feature of the work style of Captain 2d Rank V. Kondrashov, commander of the large ASW ship "Marshal Timoshenko," for example. No matter how busy he is, he always finds time to visit the crew quarters, to talk with the men in a relaxed atmosphere. His example is closely followed by all the officers on the "Marshal Timoshenko." It is not surprising that the crew has good combat morale and a sense of unity, friendship and solidarity.

I could cite numerous other such examples from the life of the fleet. The time when I myself was a young seaman is especially dear to me, however. That was almost 20 years ago, but I remember as though it were only yesterday the crew quarters on the large ASW ship "Komsomolets Ukrainy," which became like home for all times to me. I remember my loyal comrades and the demanding but sensitive commanders, whom we sincerely admired, respected and loved.

We sailors were frequently puzzled by Captain 3d Rank N. Legkiy, the executive officer on the ship at that time (now a rear admiral). The officer would descend into the crew quarters as though on nothing but official business, check on the order there and on how the work was being performed, exchange a few comments with the seamen.... And then suddenly it would become evident that the brief visit had been enough for the executive officer to learn the moods and needs of the sailors.

When I met him many years later, I asked him for the secret of that insight.

"There was no secret," Nikolay Grigor'yevich answered with a smile. "I simply made it a rule once and for all to never enter the crew quarters as a stranger. I would try to understand, to sense, the moods of my men, to put myself in their place. I was a seaman once myself, after all."

This is the sort of attunement on the same wavelength as that of the subordinates, the sort of need to feel close to them, which is lacking, in my opinion, in the officers on the escort vessel discussed above. It is not alone, however. For

some officers the short distance separating their quarters from those of the crew seems to be blocked by some sort of insuperable wall.

This occurs for various reasons. Some officers simply do not know how to organize their workday, to take time out from the press of their daily cares and concerns for personal contact with their subordinates. Others feel that they are poor indoctrinators. They would be glad to visit the men as frequently as possible, but they have nothing to say except for the memorized selection of "ready" statements and tiresome lectures. This happens to those young officers who begin avoiding the crew quarters when they first begin their service....

In other words, it is all a matter of deficiencies in the work style of certain commanders and political workers, of gaps in their ideological and professional training and their cultural outlook. It is therefore very important for the command and the party aktiv on each ship to find out precisely what separates this or that officer from the men. Some of them may need help in overcoming a barrier created by lack of confidence in themselves, to be told how to conduct themselves in the crew quarters. Greater activeness and purposiveness in the indoctrinational work needs to be demanded of others.

Those who hold in contempt the demands and needs of the seamen must be brought to especially strict accountability. And unfortunately, this happens. Not frequently, to be sure, but it happens. I once heard statements like the following in the wardroom on one of the ships: "It's not the officer's place to look after the crew quarters and the life of the seamen. That's why we have petty officers in charge of the crews and division commanders...." It goes without saying that the role of the junior commanders in the establishment of regulation order in the living quarters and the resolution of questions pertaining to material support and personal services should be enhanced in every way possible. But is it permissible for a commander or a political worker to place himself above all this? No, indifference to the men, and especially arrogance and conceit, have no place among our officers.

Problems in the crew quarters are not just problems of the ship. They must be viewed from a broader perspective. The level of political and indoctrinational work in the unit and in the formation as a whole can be judged fairly accurately from the attitude taken toward the life of the seamen in a specific crew. There are no forgotten crew quarters where the commander, the staff and the political section concentrate not just on "general coverage," not just on the implementation of various kinds of "universal" measures, but also on specific and vital work with the men.

Unfortunately, this approach is not always taken. Some of the senior chiefs are still unable to give up the armchair workstyle. They seldom visit the ships and even more rarely, the living quarters of the personnel. There are also those who are more concerned about the shortcomings becoming known at higher levels than about establishing proper order in all the crew quarters.

The position taken on this matter by Captain 2d Rank P. Puzanov, chief of the unit political section, gives cause for concern. While I was working with the

letter from Comrades Lapshin, Muntyan and others, I spoke with the political worker by telephone. Strange as it seems, the content of the letter and the results of the inspection interested Petr Vasil'yevich little. Instead, he insisted that I name the letter writers who had dared to air the dirty linen in public. When I refused, Captain 2d Rank Puzanov flared up and slammed down the receiver.

I thought to myself, quite frankly, that this not very polite tone of voice adopted by the senior chief might be the source of that rudeness and lack of tact encountered in his subordinates, officers D. Zubrov, S. Lukshich and others also mentioned in the letter to the editors. Rudeness sometimes spreads from top to bottom, afterall, like a chain reaction.

Incidentally, a tendency to hush up cases of nonregulation relationships also spreads in the same manner. Today, the senior chief does not want to publicize them. Tomorrow, the ship's officers will be trying to conceal them from him. Before you know it, some "old resident" in the crew quarters begins to tell the newcomer:

"Don't tell anybody about what happens here"!

Unfortunately, this vicious circle exists in some places. Not everyone understands that there should be no "shady areas" in the relationships of the military collectives, that we must stop viewing the concerns and problems in the crew quarters as something insignificant, something secondary.

But this misunderstanding exists not just on the lagging ships. It is to be found even in some crews in which things are in fairly good order. I recently spent some time on one of the modern ships of the Northern Fleet. Things are in good order there, and the indoctrinational work in general is performed on the proper level. Even there, however, I encountered an incident which made me wonder.

Petty Officer 2d Class V. Gubanov serves on that ship, in the subdivision headed by Lieutenant Captain S. Fedorov. He was always in good standing with the division commander and had been commended more than once by the other officers for his conscientious study of his specialty and his zeal in service matters. The fact that the petty officer frequently conducted himself improperly in the crew quarters and was rude to his comrades escaped their attention, however. Lightning finally struck, as they say, however, and Gubanov committed a major infraction.

One can work with an individual a great deal, communicate with him in the formations and drills, on the watches and in the meetings, and talk with him in his quarters, without learning just one thing--what he is like in the crew quarters. And the evaluation of his true qualities will suffer as a result. The indoctrinational influence applied to him will also be incomplete.

The inspiring saying "The ship is the sailor's home." has been around a long time. Its significance has become especially salient today, however, when our navy has entered the expanses of the World Ocean. Today's seamen sometimes have

no opportunity to cross over the "threshold" of that home for many weeks or even months on end. The ship-builders try to make the crew quarters on the modern ships as comfortable and convenient as possible. They consider the psychological peculiarities of life for the seamen on long cruises.... All of this is extremely important. The finest ship, however, the coziest of crew quarters, will not be like home to the sailors if the commanders, political workers, party and Komsomol activists do not demonstrate real paternal concern for establishing precise regulation order and truly comradely relations among the men in the quarters.

This kind of order and this kind of relationships have always been among the traditions of our navy. The very term "crew quarters (kubrik)" is a symbol of strong naval fraternity, friendship and solidarity.

Let us not forget this.

11499

CSO: 1801/383

## DOSAAF AND MILITARY COMMISSARIATS

### COMMANDER DISCUSSES ROLE OF 'ZARNITSA' GAMES

Moscow KRASNAYA ZVEZDA in Russian 24 Jun 83 p 4

[Interview with Arm Gen I. Gusakovskiy by Maj I. Yesyutin: "'Zarnitsa' on the March"]

[Text] The 10th All-Union Rally of Winners in the Pioneer "Zarnitsa" Military-Sport Games will open on 26 June in Dnepropetrovsk. The games have become an important focus of military-patriotic indoctrination for the upcoming generation, the improvement of which was discussed at the June 1983 Plenum of the CPSU Central Committee. More than 15 million school children take part in these games today. On the eve of the rally our nonstaff correspondent Major I. Yesyutin asked twice Hero of the Soviet Union, Army General I. Gusakovskiy, commander of the games, to answer questions of interest to our readers.

[Question] The current rally of "Zarnitsa" winners is the tenth. Tell me, please, Comrade Army General, how did these mass participation games of the Soviet Pioneers come into being and what are their objectives?

[Answer] Our country's young Leninists have an invaluable heritage--the example of life and service to the homeland set by the older generations. Their great grandfathers fought on the civil war fronts. Their grandfathers achieved the Victory in the fierce engagement with fascism. Their fathers and older brothers are vigilantly guarding socialism's conquests.

It is perfectly understandable that today's children would want to be like the heroes of the revolutionary struggle, the participants in the Soviet people's historic accomplishments. The "Zarnitsa" games are primarily designed to bring out and reinforce that desire.

Figuratively speaking, they became a part of the Pioneer ranks in January of 1967, on the eve of the 50th anniversary of the Great October Socialist Revolution. The young patriots entered into the games with enthusiasm. Riflemen and scouts, signalmen, medical workers and firefighters... developed in the youthful army detachments. In November of 1968 the Komsomol Central Committee noted the first successes of the "Zarnitsa" games, their extensive scale and popularity among the Pioneers and schoolchildren.

"Zarnitsa" is more than a game, however. It is extensive and intensive work, the persistent study of the fundamentals of military affairs and preparation for work and defense of the USSR. Labor forays and "Obelisk," "Slava" and "Dolg" operations, quizzes and competitions on the history of our homeland and of the Armed Forces of the USSR, GTO [Ready for Work and Defense] multiple-event competitions, tours and visits to military units and ships have become traditional.

The All-Union rallies of "Zarnitsa" winners are exhibits of the work being performed. They are held at sites having to do with our socialist homeland's heroic past. This year's finale for the young armymen will take place on ground where one of the largest battles of the Great Patriotic War, the forcing of the Dnepr by Soviet troops, was launched almost 40 years ago. It is dedicated to the 65th anniversary of the Lenin Komsomol.

[Question] During the time which has elapsed since the last rally of winners of the "Zarnitsa" games, they have been enriched with new substance and interesting forms of work. Tell us about this, please.

[Answer] Like any living thing, the "Zarnitsa" games are constantly developing. The program and the standards for the games are becoming more complex. I would say that the "Zarnitsa" games today constitute an entire complex of forms and methods of heroic-patriotic indoctrination of the Pioneers and schoolchildren.

Thousands of meetings with veterans of the Great Patriotic War and fightingmen of the Soviet Armed Forces have been conducted during the past 2 years alone. The teenagers have assumed the care of 92,000 monuments, obelisks and fraternal graves. School museums and combat glory rooms have become centers of heroic-patriotic indoctrination.

The "Zarnitsa" participants take an active part in the All-Union expeditionary search, "Chronicle of the Great Patriotic War." They record the memoirs of the frontline fighters and participants in the partisan movement, underground fighters and workers in the rear area, look for relics of the wartimes and turn them over to museums and archives, and assume patronage over disabled veterans of the Patriotic War.

The movement "Signalers and Buglers" is now gaining strength in the young army detachments and battalions. All of the new things which have recently become a part of the "Zarnitsa" games will be discussed in greater detail at a conference, "The Young Armymen on the March," in Dnepropetrovsk.

[Question] As they participate in the "Zarnitsa" games the children master many useful skills. How does this influence their choice of a career?

[Answer] Good civic and patriotic feelings, mutual assistance, strength and courage.... You will agree that every individual needs these qualities. They are especially important, however, to those who dream of becoming career servicemen. The games engaged in while they are still children teach them precision, efficiency and discipline. Military service is inconceivable without these.

Here are just two letters. One of them is from Aleksandr Khmelyarskiy, a cadet at a military school: "I am very proud," he writes, "that I served at post No. 1 in our city. It was then that I decided to devote my life to service in the ranks of our Armed Forces...."

The second letter is from Sasha Kol'tsov and Anton Leonov from Leningrad School No. 270. They report the following: "Our school has long been friendly with the cadets at the military-political school. They help the Pioneer detachments to prepare for the 'Zarnitsa' games, hold song and drill competitions and tell us many interesting things about the heroic occupation of defending the homeland. Many of our graduates enter that school. Nikolay Ivanov, for example, is already a captain; Igor' Kafanov and Sasha Golub are in their first year of study. We also plan to become militarymen...."

The "Zarnitsa" games are 16 years old. Today many of the former young army men are serving in the army and navy, studying at military educational institutions, commanding platoons and companies....

Lieutenant Aleksandr Stovba, a remarkable Soviet man, grew up in the land where the next rally is to be held. A former participant in the "Zarnitsa" games, he developed a great sense of duty during his years as a Pioneer. And when the time came, Sasha did what people strong in spirit do. He died in the performance of his international duty. His life and his feat, however, still shine and will continue to shine in the brilliant flashes of the Pioneer "Zarnitsa" games, in the noble deeds of their participants.

[Question] Comrade Army General, I would like to hear something about the prospects for development of the games in the immediate future.

[Answer] The second phase of the "Zarnitsa" five-year period will be concluded with the current 10th rally of the winners. The main staff of the games will launch the start of a new phase in September of this year. It will last until August of 1985 and will be dedicated to the 115th anniversary of the birth of V.I. Lenin and to the 40th anniversary of the Victory gained by the Soviet people in the Great Patriotic War.

We link the successes achieved in the military-patriotic indoctrination of the young generation to the active participation in the work of the young army detachments and battalions by Great Patriotic War veterans and fightingmen of the Soviet Army and Navy. In our work we attempt to see that the Pioneers and school-children, our "Zarnitsa" participants, acquire the remarkable qualities in their youth and grow up to be real patriots of the socialist homeland.

11499

CSO: 1801/385

- END -